UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
HWANG, JOON H

ART UNIT	PAPER NUMBER
2166	

DATE MAILED: 12/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	10/605,000	DIORIO ET AL.
Office Action Summary	Examiner	Art Unit
	Joon H. Hwang	2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>29 August 2003</u>.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-20</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>29 August 2003</u> is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   The claims 1-20 are pending.

Specification

2.   The disclosure is objected to because of the following informalities:

- "]The invention" in 1st line of specification section 12 should be "The
invention".

Appropriate correction is required.

Drawings

3.   The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5)
because they do not include the following reference sign(s) mentioned in the
description: "User 10" in 1st line of specification section 37. Corrected drawing sheets in
compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid
abandonment of the application. Any amended replacement drawing sheet should
include all of the figures appearing on the immediate prior version of the sheet, even if
only one figure is being amended. Each drawing sheet submitted after the filing date of
an application must be labeled in the top margin as either "Replacement Sheet" or "New
Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,
the applicant will be notified and informed of any required corrective action in the next
Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4.   Claims 4-20 are objected to because of the following informalities:

- "includes" in 2nd line of claims 4-9 and 17-19 should be "include";

- "a uses" in 2nd line of claims 10-16 should be "uses";

- "a postal databases" in 2nd line of claim 17 should be "a postal database";

- "conjunction parts" in 5th line of claim 20 should be "component parts";

- "includes" in 7th line of claim 20 should be "include";

- "a titles database." In 8th line of claim 20 should be "a titles database,";

    and

- "includes" in 10th line of claim 20 should be "include".

Appropriate correction is required.

Claim Rejections - 35 USC § 101

5.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6.   Claims 1-13 and 17-19 are rejected under 35 U.S.C. 101 because the claimed

invention is directed to non-statutory subject matter.

"a system" in 1st line of claim 1 is non-statutory as not being **tangibly embodied**

in a manner so as to be executable. Since claims 2-13 and 17-19 incorporate the

deficiencies of claim 1 and do not add tangibility to the claimed subject matter, they are

likewise rejected.

Claim Rejections - 35 USC § 102

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8.   Claims 1, 3-12, and 18-19 are rejected under 35 U.S.C. 102(b) as being

anticipated by Ravin et al. (U.S. Patent No. 5,819,265).

With respect to claim 1, Ravin teaches a system for extracting data from

electronically sources (i.e., a system for extracting proper names from documents, lines

1-15 in col. 3, lines 26-38 in col. 5, and fig. 1). Ravin teaches a processing system

using a plurality of component parts working in conjunction producing extraction results

(i.e., name extraction processor 300 using a plurality of component parts, such as

authority list 125 and tokenizer 115 in fig. 1, to produce extracted proper names, lines 1-

5 and 26-55 in col. 5).

With respect to claim 3, Ravin teaches the component parts include a plurality of

databases (i.e., one or more databases 130 storing a dictionary or list of names 130A in

fig. 1, lines 52-67 in col. 4 and lines 44-50 in col. 3).

With respect to claim 4, Ravin teaches a names database (i.e., a database

storing a list of names, lines 39-55 in col. 5 and line 62 in col. 6 thru line 4 in col. 7).

With respect to claim 5, Ravin teaches an additional words database (i.e., a

database of a list of special words, lines 39-55 in col. 5).

With respect to claim 6, Ravin teaches a titles database (i.e., a database storing a list of titles, lines 39-55 in col. 5).

With respect to claim 7, Ravin teaches a plurality of small database (i.e., one or more databases 130 storing a dictionary or list of names 130A in fig. 1, lines 52-67 in col. 4 and lines 44-50 in col. 3).

With respect to claim 8, Ravin teaches a famous people database (i.e., a database storing a list of names of people, which include a famous people, such as President Clinton, Martin Luther King Jr., Queen Elizabeth II., etc, lines 55-64 in col. 1, line 3 in col. 16, and lines 37-53 in col. 17).

With respect to claim 9, Ravin teaches a historic figure database (i.e., a database storing a list of names of famous people as discussed above in claim 8 or a list of names of places that are historic, such as The White House, Paris France, etc., lines 19-24 in col. 2 and lines 6-14 in col. 16).

With respect to claim 10, Ravin teaches the processing system uses an extraction algorithm (i.e., name extraction process 300, lines 37-47 in col. 14, lines 26-55 in col. 5, lines 18-36 in col. 6, and line 61 in col. 9 thru line 45 in col. 10).

With respect to claim 11, Ravin teaches the processing system uses a substring scoring algorithm (i.e., if a substring is an organization word, return a negative score, lines 18-31 in col. 18 and line 62 in col. 16 thru line 18 in col. 17).

With respect to claim 12, Ravin teaches the processing system uses a final name scoring algorithm (i.e., analyzing all substrings/parts of a name element and if the

confidence score is high enough, then the entity-type (person, organization, place, etc) is assigned to the name element, line 62 in col. 16 thru line 18 in col. 17).

With respect to claim 18, Ravin teaches a direction database (i.e., a database storing geographical modifiers, such as north, lines 39-42 in col. 10 and lines 39-55 in col. 5).

With respect to claim 19, Ravin teaches a time database (i.e., a database storing a list of dates, lines 39-55 in col. 5).

Claim Rejections - 35 USC § 103

9.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10.   Claims 2 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ravin et al. (U.S. Patent No. 5,819,265) in view of Himmelstein et al. (U.S. Patent No. 6,701,307).

With respect to claim 2, Ravin discloses the claimed subject matter as discussed above except the source is a website. However, Himmelstein teaches the source is a website (i.e., spidering web pages, lines 36-39 in col. 1, lines 44-50 in col. 3, and lines 21-24 in col. 4) in order to increase scalability of data sources. Therefore, based on Ravin in view of Himmelstein, it would have been obvious to one having ordinary skill in

the art at the time the invention was made to utilize the teaching of Himmelstein to the

system of Ravin in order to increase scalability of data sources.

With respect to claim 17, Ravin discloses the claimed subject matter as

discussed above except a postal database. Himmelstein teaches a postal database

used for extracting a street address (i.e., an address extractor uses an auxiliary table,

lines 56-63 in col. 5, lines 19-60 in col. 6, and lines 30-43 in col. 3) in order to improve

searching of documents. Therefore, based on Ravin in view of Himmelstein, it would

have been obvious to one having ordinary skill in the art at the time the invention was

made to utilize the teaching of Himmelstein to the system of Ravin in order to improve

searching of documents.

11.   Claims 13-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Ravin et al. (U.S. Patent No. 5,819,265) in view of Yuret (U.S. Patent No.

6,957,213).

With respect to claim 13, Ravin discloses the claimed subject matter as

discussed above except a plurality of user interface elements. However, Yuret teaches

a plurality of user interface elements used in identifying proper names in a text (i.e.,

manually modifying scores, line 63 in col. 6 thru line 29 in col. 7, lines 28-53 in col. 8) in

order to enhance a domain-specific scoring process. Therefore, based on Ravin in view

of Yuret, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to utilize the teaching of Yuret to the system of Ravin in order to

enhance a domain-specific scoring process.

With respect to claim 14, Ravin discloses the claimed subject matter as discussed above except a substring score threshold increments user interface element. However, Yuret teaches a substring score threshold increments user interface element used in identifying proper names in a text (i.e., manually increasing a score for a term, line 63 in col. 6 thru line 29 in col. 7, lines 28-53 in col. 8) in order to enhance a domain-specific scoring process. Therefore, based on Ravin in view of Yuret, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Yuret to the system of Ravin in order to enhance a domain-specific scoring process.

With respect to claim 15, Ravin discloses the claimed subject matter as discussed above except a substring score decrements user interface element. However, Yuret teaches a substring score decrements user interface element used in identifying proper names in a text (i.e., manually decreasing a score for a term, line 63 in col. 6 thru line 29 in col. 7, lines 28-53 in col. 8) in order to enhance a domain-specific scoring process. Therefore, based on Ravin in view of Yuret, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Yuret to the system of Ravin in order to enhance a domain-specific scoring process.

With respect to claim 16, Ravin discloses the claimed subject matter as discussed above. Ravin further discloses a special word for extracting proper names (lines 39-55 in col. 5 and lines 30-34 in col. 8). Ravin does not explicitly disclose a substring score special cases user interface element. However, Yuret teaches

manually modifying scores for terms that would include a special word (line 63 in col. 6

thru line 29 in col. 7, lines 28-53 in col. 8) in order to enhance a domain-specific scoring

process. Therefore, based on Ravin in view of Yuret, it would have been obvious to one

having ordinary skill in the art at the time the invention was made to utilize the teaching

of Yuret to the system of Ravin in order to enhance a domain-specific scoring process.

With respect to claim 20, Ravin teaches a system for extracting data from

electronically sources (i.e., a system for extracting proper names from documents, lines

1-15 in col. 3, lines 26-38 in col. 5, and fig. 1). Ravin teaches a processing system

using a plurality of component parts working in conjunction producing extraction results

(i.e., name extraction processor 300 using a plurality of component parts, such as

authority list 125 and tokenizer 115 in fig. 1, and producing extracted proper names,

lines 1-5 and 26-55 in col. 5). Ravin teaches the conjunction parts including a plurality

of databases (i.e., one or more databases 130 storing a dictionary or list of names 130A

in fig. 1, lines 52-67 in col. 4 and lines 44-50 in col. 3) and a plurality of algorithms (lines

37-47 in col. 14, lines 26-55 in col. 5, lines 18-36 in col. 6, line 61 in col. 9 thru line 45 in

col. 10, lines 18-31 in col. 18, and line 62 in col. 16 thru line 18 in col. 17). Ravin

teaches the databases include an additional words database (i.e., a database of a list

of special words, lines 39-55 in col. 5), a titles database (i.e., a database storing a list of

titles, lines 39-55 in col. 5), a famous people database (i.e., a database storing a list of

names of people, which include a famous people, such as President Clinton, Martin

Luther King Jr., Queen Elizabeth II., etc, lines 55-64 in col. 1, line 3 in col. 16, and lines

37-53 in col. 17), and a historic figure database (i.e., a database storing a list of names

of famous people as discussed above or a list of names of places that are historic, such

as The White House, Paris France, etc., lines 19-24 in col. 2 and lines 6-14 in col. 16).

Ravin teaches the algorithms include an extraction algorithm (i.e., name extraction

process 300, lines 37-47 in col. 14, lines 26-55 in col. 5, lines 18-36 in col. 6, and line 61

in col. 9 thru line 45 in col. 10), a substring scoring algorithm (i.e., if a substring is an

organization word, return a negative score, lines 18-31 in col. 18 and line 62 in col. 16

thru line 18 in col. 17), and a final name scoring algorithm (i.e., analyzing all

substrings/parts of a name element and if the confidence score is high enough, then the

entity-type (person, organization, place, etc) is assigned to the name element, line 62 in

col. 16 thru line 18 in col. 17). Ravin further discloses a special word for extracting

proper names (lines 39-55 in col. 5 and lines 30-34 in col. 8). Ravin does not explicitly

disclose a plurality of user interface elements. However, Yuret teaches a plurality of

user interface elements used in identifying proper names in a text (i.e., manually

modifying scores, line 63 in col. 6 thru line 29 in col. 7, lines 28-53 in col. 8), wherein the

user interface elements include a substring score threshold increments user interface

element (i.e., manually increasing a score for a term, line 63 in col. 6 thru line 29 in col.

7, lines 28-53 in col. 8), a substring score decrements user interface element (i.e.,

manually decreasing a score for a term, line 63 in col. 6 thru line 29 in col. 7, lines 28-53

in col. 8), and a substring score special cases user interface element (manually

modifying scores for terms that would include a special word, line 63 in col. 6 thru line

29 in col. 7, lines 28-53 in col. 8) in order to enhance a domain-specific scoring process.

Therefore, based on Ravin in view of Yuret, it would have been obvious to one having
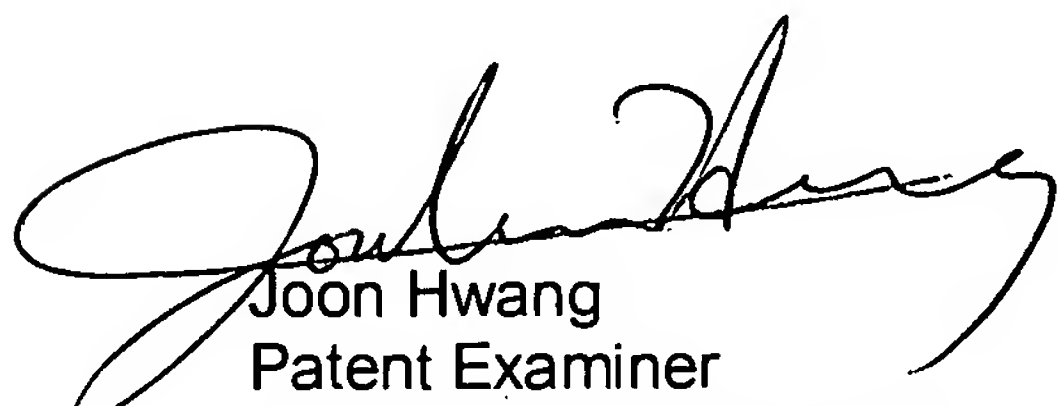
ordinary skill in the art at the time the invention was made to utilize the teaching of Yuret

to the system of Ravin in order to enhance a domain-specific scoring process.

12.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joon H. Hwang whose telephone number is 571-272-

4036. The examiner can normally be reached on 9:30-6:00(M~F).

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hosain T. Alam can be reached on 571-272-3978. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Joon Hwang
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Technology Center 2100

12/6/05